

Title (en)  
TYRE

Title (de)  
REIFEN

Title (fr)  
PNEUMATIQUE

Publication  
**EP 3636459 A1 20200415 (EN)**

Application  
**EP 19197535 A 20190916**

Priority  

- JP 2018193642 A 20181012
- JP 2018193641 A 20181012
- JP 2018193643 A 20181012

Abstract (en)

A tyre includes a tread portion including a first middle land portion, a second middle land portion, a first shoulder land portion, and a second shoulder land portion. The first middle land portion is provided with first middle lateral grooves terminating within the first middle land portion, the second middle land portion is provided with second middle lateral grooves terminating within the second middle land portion, the first shoulder land portion is provided with first shoulder lateral grooves, and the second shoulder land portion is provided with second shoulder lateral grooves. The first middle lateral grooves and the second middle lateral grooves are inclined in a first direction with respect to the tyre axial direction, and the first shoulder lateral grooves and the second shoulder lateral grooves are inclined in a second direction opposite to the first direction with respect to the tyre axial direction.

IPC 8 full level

**B60C 11/03** (2006.01); **B60C 11/12** (2006.01); **B60C 11/13** (2006.01)

CPC (source: CN EP US)

**B60C 11/0304** (2013.01 - EP US); **B60C 11/1204** (2013.01 - US); **B60C 11/1236** (2013.01 - EP US); **B60C 11/124** (2013.01 - CN);  
**B60C 11/1263** (2013.01 - EP); **B60C 11/1369** (2013.01 - EP); **B60C 11/1392** (2013.01 - EP US); **B60C 2011/0334** (2013.01 - US);  
**B60C 2011/0341** (2013.01 - CN US); **B60C 2011/0344** (2013.01 - EP); **B60C 2011/0353** (2013.01 - EP); **B60C 2011/0358** (2013.01 - US);  
**B60C 2011/0369** (2013.01 - EP); **B60C 2011/0372** (2013.01 - EP US); **B60C 2011/0381** (2013.01 - EP US); **B60C 2011/0383** (2013.01 - US);  
**B60C 2011/1254** (2013.01 - EP US); **B60C 2200/04** (2013.01 - EP)

Citation (applicant)

JP 2015140047 A 20150803 - SUMITOMO RUBBER IND

Citation (search report)

- [XA] EP 2151333 A1 20100210 - YOKOHAMA RUBBER CO LTD [JP]
- [XA] EP 3318421 A1 20180509 - SUMITOMO RUBBER IND [JP]
- [XA] JP 2013018309 A 20130131 - BRIDGESTONE CORP
- [A] US 2010212792 A1 20100826 - MITA MASAYA [JP]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 3636459 A1 20200415; EP 3636459 B1 20220406**; CN 111038179 A 20200421; CN 111038179 B 20230407; US 11446963 B2 20220920;  
US 2020114696 A1 20200416

DOCDB simple family (application)

**EP 19197535 A 20190916**; CN 201910869627 A 20190916; US 201916571317 A 20190916